

ABSTRACT

A nozzle orifice of a nozzle (1) includes a tapered segment (16) extending from an elliptical discharge orifice (15) and having a taper angle θ of 30 to 80°, and a large-diameter segment (18) continuing with the tapered segment. The ratio of the inner diameter of large-diameter segment (18) relative to the minor diameter of the discharge orifice (15) is not less than 3 and less than 7. Also, the discharge flow from the nozzle spreads in a single direction (width direction) within a plane perpendicular to the central axis of the nozzle and the erosion thickness angle is 1.5 to 3° in the direction (thickness direction) perpendicular to the width direction. Such a descaling nozzle enables that scale is removed efficiently at low pressure and/or low flow rate while restraining the cooling of a steel plate.